

## ABSTRACT

A method of designing a hardware and software system specification. In the method services are defined and a use case is defined for each service; each use case is associated with at least one system start state, a user request and, for each start state, a system end state; operations are defined and, at the same time, a set of elementary operations is defined for each state, the set corresponding to the response from the system at the time of entry into the state; the architecture of the system is specified, defining electronic control units and networks; and elementary operations are placed on computers. Further, the method executes at least one of (1) identifying data flows circulating over the networks according to the placement or (2) identifying specification interfaces of the computers according to the placement.